

REMARKS

Claims 1-12, 14-17 and 19-24 are pending in which claims 1 and 16 are independent. At paragraph 1 in the Office Action, the Examiner objected to claim 1 because the term “said channel resources” should be changed to “said channel resource devices.” Applicant has amended the claim to make this correction.

Within the remaining paragraphs in the Office Action, the Examiner rejected claims 1-12, 14-17 and 19-24 under 35 U.S.C. § 103(a).

The Examiner rejected claims 1-4, 6, 9-12, 14-17 and 19-23 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,963,926 (Robinson) in view of U.S. Patent Application Publication No. 2001/0010681 (McCallister). To establish a *prima facie* case of obviousness under § 103, the cited references must teach or suggest all the claim limitations. (MPEP § 2142). Applicant submits that neither Robinson nor McCallister, separately or in combination, teach or suggest a method including (i) “receiving connection outcome results of previous call connections [that] ... are indicative of channel resource device failures,” (ii) “generating a statistical analysis based at least in part, on the connection outcome results,” and (iii) “assigning an incoming call to at least one available channel resource device [based] ... at least in part, in response to the statistical analysis,” as in claim 1 and similarly in claim 16.

The Examiner only cited to the background section in Robinson in which two routing algorithms are discussed; a spill-forward routing algorithm and a sequential routing algorithm. In the spill-forward routing algorithm, each node of a network has a routing table containing for each possible destination node a list of the links leaving that node ranked in order of their link blocking probabilities (i.e., probability that the next link is unavailable). The spill-forward algorithm sends a call request to the first available link on the list and if that link is blocked, the

call request is dropped and re-initiated by the originator. If that link is good, the node that received the call request performs the same steps using its own list of links. (Col. 2, lines 28-43).

Robinson then describes the sequential routing algorithm as being a modification of the spill-forward routing algorithm. Here, each node has the same routing table and call requests are processed in the same manner, except that if a link is blocked the call request is not dropped. Rather, the call request is “cranked back” (i.e., returned) to the closest preceding node that has any untried links. When a node returns a call request packet to a neighboring node, the node inserts a route history in a header of the call request by adding a field containing its own identity, the neighboring node identity and an indication that the packet is being returned. (Col. 2, lines 43-57).

Applicant submits that Robinson does not teach “generating a statistical analysis based at least in part, on the connection outcome results,” as in claim 1. Robinson only teaches that nodes have lists of links leaving that node ranked in order of their link blocking probabilities. Robinson does not mention at all how the link blocking probabilities are calculated. Because there is no description of how the probabilities are calculated, Robinson does not teach “generating a statistical analysis based at least in part, on the connection outcome results.” The Examiner acknowledges this, and stated that the Examiner “maintains [that] the list is dynamically updated due to crank back information.” (Office Action, p. 3). The Examiner has made this statement without any support to such teachings contained within Robinson. To establish a *prima facie* case of obviousness, the cited reference must teach or suggest all the claim limitations (MPEP § 2141.03). Unsupported assumptions by the Examiner are insufficient to establish a *prima facie* case of obviousness.

The Examiner attempted to support his conclusion of dynamically updating the information within the link tables in order to obviate the claim language “generating a statistical analysis based at least in part, on the connection outcome results” by referring to the teaching in Robinson of the sequential routing algorithm and returning a call request packet to a neighboring node when a link is blocked with a route history inserted into a header of the call request. However, Robinson fails to teach that the neighboring node performs any statistical analysis based on the route history. In fact, no statistical analysis is performed at that point in the method disclosed in Robinson. Rather, the neighboring or preceding node that receives the returned call request simply attempts to send the call request to any still-untried links. The neighboring node does not update its link table, or recalculate new link blocking probabilities using the crank-back information. The neighboring node uses the crank-back information to identify which links are blocked, and thus which links should be avoided.

In addition, Applicant also submits that Robinson does not teach “receiving connection outcome results of previous call connections … [that] are indicative of channel resource device failures,” as in claim 1. The Examiner stated that Robinson is silent to this point, and cited McCallister as allegedly teaching this subject matter. However, McCallister fails to makeup for the shortcomings of Robinson.

Applicant submits that McCallister fails to teach “receiving connection outcome results of previous call connections … [that] are indicative of channel resource device failures,” and “generating a statistical analysis based at least in part, on the connection outcome results,” as in claim 1 and similarly in claim 16. The Examiner cited the McCallister reference for the suggestion of outcome results being indicative of channel resource device failures, and that it

would have been obvious to modify the system of Robinson so that signals would be returned in the event of a failure of the channel resource device. Applicant respectfully disagrees.

McCallister teaches a method for establishing a switched virtual circuit in a digital network that has network nodes with static routing tables. The static routing tables contain primary and alternate routing data. When a node is unable to forward a call over its outgoing primary route due to congestion or physical failure, it clears the call at that node and sends a crank-back message to the preceding node, which responds to the crank-back message by attempting to re-route the call over the alternate route. (Abstract). Thus, the only information that a preceding node can garner from a crank-back message is that the primary route was unavailable. The crank-back message does not indicate that a particular node has a physical failure. McCallister only states that a physical failure of a node may be one reason that a primary route is unavailable [0019]. Other reasons are available too, and thus the crank-back message is ambiguous as to any indication. Applicant submits that McCallister does not teach “receiving connection outcome results of previous call connections … [that] are indicative of channel resource device failures.”

The Examiner also rejected dependent claims 5, 7-8 and 24 under 35 U.S.C § 103(a) as being unpatentable over the combination of Robinson and McCallister, and further in view of one of U.S. Patent No. 6,810,343 (McKee), U.S. Patent No. 5,831,976 (Lin), or Applicant’s Admitted Prior Art (AAPA). Applicant submits that none of the additional references make up for the shortcomings of the combination of Robinson and McCallister.

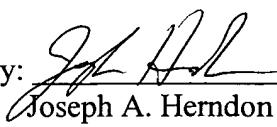
Because none of the asserted combinations of references teach or suggest all claim limitations of either of independent claims 1 and 16, Applicant submits that none of the asserted combination of references render the pending claims obvious. Applicant respectfully submits

that, in view of the remarks above, all of the pending claims are in condition for allowance. Applicant therefore respectfully requests such action. The Examiner is invited to call the undersigned at (312) 913-3331 with any questions or comments.

Respectfully submitted,

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Date: 11/6/06

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